Name:

at1121exam_practice: Radicals and Squares (v620)

Question 1

Simplify the radical expressions.

$$\sqrt{28} \qquad\qquad \sqrt{99} \qquad\qquad \sqrt{18}$$

Question 2

Find all solutions to the equation below:

$$\frac{(x-10)^2}{6} - 7 \;=\; -1$$

Question 3

By completing the square, find both solutions to the given equation. *You must show work for full credit!*

$$x^2 - 8x \; = \; 9$$

Question 4

A quadratic polynomial function is shown below in standard form.

$$y \; = \; 4x^2 + 40x + 97$$

Express the function in **vertex form** and identify the **location** of the vertex.